

Desktop Class Spinpoint F1 DT



| Capacity | | 160GB | 250GB | 320GB | 500GB | 640GB | 750GB | 1TB |
|----------|------|---------|---------|---------|--------|---------|---------|---------|
| Model | 8MB | HD161GJ | HD251HJ | HD321HJ | HD501J | | | |
| | 16MB | HD162GJ | HD252HJ | HD322HJ | HD502J | HD642JJ | | |
| | 32MB | | | | | | HD753LJ | HD103UJ |

FEATURES

- MAX.334GB Formatted Capacity Per Disk
- Serial ATA 3.0Gbps Interface Support
- Improved recording stability over temperature with PMR
- Advanced dynamic FOD control for best data integrity
- Intelligent compensation of external disturbance
- SATA Native Command Queuing Feature
- Device Initiated SATA Power Management
- Rotational vibration sensor
- Environment friendly product with RoHS compliance
- Improved performance with dual-ARM based firmware
- ATA S.M.A.R.T. Compliant
- ATA Automatic Acoustic Management Feature
- ATA 48-bit Address Feature
- ATA Device Configuration Overlay Feature
- NoiseGuard™
- SilentSeek™

DRIVE CONFIGURATION

| | |
|-------------------------------|--------------------|
| Interface | Serial ATA 3.0Gbps |
| Buffer DRAM Size ² | 8 / 16 / 32 MB |
| Byte per Sector | 512 bytes |
| Rotational Speed | 7,200 RPM |

PERFORMANCE SPECIFICATIONS

| | |
|-----------------------------|------------------|
| Average Seek time (typical) | 8.9 ms |
| Average Latency | 4.17 ms |
| Data Transfer Rate | |
| Media to/from Buffer (Max.) | 175 MB/sec |
| Buffer to/from Host (Max.) | 300 MB/sec |
| Drive Ready Time (typical) | |
| | 160~320GB 8 sec |
| | 500~640GB 12 sec |
| | 750~1000GB |

RELIABILITY SPECIFICATIONS

| | |
|----------------------------|-----------------------------------|
| Non-recoverable Read Error | 1 sector in 10 ¹⁵ bits |
| Start/Stop Cycles | 50,000 |

ACOUSTICS³

| | | |
|------------------|------------|----------|
| Idle | 160~320GB | 2.45 Bel |
| | 500-1000GB | 2.70 Bel |
| Performance Seek | 250/320GB | 2.80 Bel |
| | 500-1000GB | 2.90 Bel |

POWER REQUIREMENTS

| | | | |
|-----------------------|------------------|-------|--------|
| Voltage | +5V±5%, +12V±10% | | |
| Capacity ¹ | 160GB | 500GB | 750GB |
| | 250GB | 650GB | 1000GB |
| | 320GB | | |

| | | | |
|-----------------------------|--------|--------|--------|
| Spin-up Current (Max) | 2.0A | 2.3A | 2.4A |
| Seek (typical) ⁴ | 5.7W | 6.9W | 7.6W |
| Read/Write (typical) | 6.1W | 7.4W | 8.4W |
| Idle (typical) | 4.4W | 5.7W | 6.7W |
| Standby (typical) | 0.7/1W | 0.7/1W | 0.7/1W |
| Sleep (typical) | 0.7/1W | 0.7/1W | 0.7/1W |

ENVIRONMENTAL SPECIFICATIONS

| | |
|-----------------------------------------|------------------|
| Temperature | |
| Operating | 0 ~ 60 °C |
| Non-operating | -40 ~ 70 °C |
| Humidity (non-condensing) | |
| Operating | 5 ~ 90 % |
| Non-operating | 5 ~ 95 % |
| Linear Shock (1/2 sine pulse) | |
| Operating | 70G |
| Non-operating | 160~320GB 350 G |
| | 500~1000GB 300 G |
| Altitude (relative to sea level) | |
| Operating | -300 to 3,000 m |
| Non-operating | -300 to 12,000 m |

PHYSICAL DIMENSION

| | |
|---------------|------------------|
| Height (Max.) | 26.1 mm |
| Width | 101.5 mm |
| Length | 147.0 mm |
| Weight (avg.) | 160~320GB 470 g |
| | 500/640GB 610 g |
| | 750/1000GB 650 g |

* Note : Design and specifications are subject to change without prior notice

1.1MB = 1,000,000 Bytes, 1GB=1,000,000,000 Bytes

2. A small portion of the 8/16/32MB buffer memory is reserved for firmware use

3 Average value with a high performance cover.

4 Random seek with 30% duty cycle.(Average value)

